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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/364,788	07/30/1999	BENJAMIN N. ELDRIDGE	P84-US	9878

50905 7590 02/07/2007
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EXAMINER

PRASAD, CHANDRIKA

ART UNIT	PAPER NUMBER
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2839

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

09/364,788

Applicant(s)

ELDRIDGE ET AL.

Examiner

Chandrika Prasad

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 90-119 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 90-119 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>01/22/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/17/07 has been entered.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 90-98, 102-112 and 116-119 are rejected under 35 U.S.C. 102(b) as being anticipated by Schroeder (3,550,261).

Schroeder (Figures 1-3) shows an electronic component comprising a substrate (a semiconductor device) 10 including a plurality of conductive areas 12 and a plurality of resilient conductive contact structures (metal layers) 20, each having a base portion (not numbered) coupled to the conductive areas and a tip portion (not numbered) displaced from the substrate and the base portion and a beam portion (not numbered) between the base portion and the tip portion wherein a width of a length of the beam portion decreases along its length from the base portion to the tip portion. Each of the base

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portion, the beam portion and the tip portion comprise a plurality of layers 16, 18 of different metallic materials. The substrate has a conductive layer 13 coupling the conductive areas to internal circuitry and a passive layer on the surface of the substrate with openings at the conductive areas which forms a plurality of terminals electrically connected to the conductive areas. The tip portion comprises a pointed end. The contact structures are spaced 0.0125 cm apart which is between 2.5 micron (0.0000025 meters) and 2000 micron (0.002 meters). The beam portion has a linear slope from the base to the tip. The tip portion is rectangular in shape. Each contact structure has only one tip and only one beam portion. Schroeder further shows another substrate including a conductive contact element in physical contact with the one and only tip portion (see Figure 2).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 99-101 and 113-115 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schroeder (3,550,261).

Schroeder shows all the features of these claims except the tip being beveled, triangular or quadrilateral in shape. An official notice is given that such shapes are well known in the art of electrical connectors. The applicant has not provided any specific reasons or problems to be solved by having these shapes. It would have been obvious

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to one of ordinary skill in the art at the time of the instant invention to select such shapes from one of numerous configurations because such a selection is generally recognized as being within the level of ordinary skill in the art.

Response to Arguments

6. Applicant's arguments with respect to claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion


7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892 attached.

Contact Information

8. Any correspondence to this action may be mailed to:

**Commissioner for Patents
Post Office Box 1450
Alexandria, VA 22313-1450**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chandrika Prasad whose telephone number is (571) 272-2099. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor can be reached at (571) 272-2800 ext 39. The fax number is 571-273-8300.


Chandrika Prasad
Primary examiner
February 2, 2007